

access phase of a hard disk and may be made to shorten the scanning time amount of FAT information by having another FAT memory for storing the FAT information recorded on the conventional hard disk.

[0010]

[Means for Solving the Problem] An arm head for reading data which this invention recorded data on a hard disk, or was already recorded, in order to attain said purpose, Non-volatile FAT memory which reading and a store are possible and stores FAT information, It is characterized by consisting of controllers which control migration actuation of said arm head, control rotation actuation of said hard disk according to FAT information stored in said FAT memory, and control a store and reading of data.

[0011]

[Embodiment of the Invention] Hereafter, with reference to the desirable example by this invention, it explains to an accompanying drawing at details.

[0012] The hard disk driver who carried out the interior of the FAT memory of this invention [ whether as shown in drawing 1 , data is recorded on the hard disk 31 divided into two or more sectors (SEC0-SEC47) by the sector partition line (SEC) and the track (TRA), and ] The arm head 32 for reading the already recorded data, and the non-volatile FAT memory 33 which reading and a store are possible and stores FAT information, Control migration actuation of an arm head 32 and rotation actuation of a hard disk 31 is controlled. It consists of controllers 34 which control record and read-out of data and to control, and the buffer ring of the data outputted and inputted with the controller 34 and the data bus (BUS) is carried out by the buffer 35.

[0013] As shown in drawing 2 , sequential formation of a boot area (BOOT), a root directory field (RD), and the data area (DATA) is carried out at said two or more sectors (SEC0-SEC47).

[0014] Thus, it is as follows if the actuation and the effect of a hard disk driver which carried out the interior of the FAT memory by constituted this invention are explained.

[0015] First, as shown in drawing 2 , hard disks 31 differ in the conventional hard disk 11, do not include a FAT field (FATS), and are stored in the FAT memory 33 whose FAT information is a nonvolatile memory element by this invention.

[0016] Therefore, when the data which the data supplied from the outside was recorded on the hard disk 31, or was already recorded on the hard disk 31 is read, a controller 34 moves an arm head 32 to the inside or the outside of a hard disk 31, and after it rotates a hard disk 31 and looks for a request sector, it will read data through the access process of the following phases.

[0017] \*\* A controller 34 controls an arm head 32, scans the address of an initiation cluster by the root directory (RD), and recognizes the location of an initiation cluster. \*\* A controller 31 is in the condition to which the arm head 32 was made to fix, and its speed which reads the FAT information stored in the FAT memory 33, recognizes a whole cluster address, and recognizes a whole cluster address in this case is quicker than the speed by which FAT information is accessed in the conventional FAT field (FATS) about 50 times. \*\* Record whether a controller 34 moves an arm head 32 to a data area (DATA), and reads data.

[0018]

[Effect of the Invention] As explained above, by not being recorded on a hard disk and writing FAT information in the non-volatile FAT memory accessed quickly relatively, this invention can reduce the count which accesses a hard disk, and can shorten the whole access time. Moreover, since FAT information is not stored in a hard disk, the capacity of a hard disk increases.

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[Translation done.]

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